

IN THE CLAIMS:

Please amend the claims as follows:

23. (Amended) A device for reproducing a digital signal recorded on a medium, the digital signal including a video signal, a plurality of audio signals encoded into audio channels wherein each audio signal is composed of data units [at least one sector of audio information,] and indicating information [located in front of the audio information] for identifying each audio signal, a block of the data units being sequentially interleaved between data units of video signal, each audio signal being represented by one of the data units in the block, [wherein each audio sector is interleaved as a predetermined unit] comprising:

a demodulator for demodulating the digital signal to restore an original signal;

a signal processor for receiving the plurality of audio signals, extracting the indicating information, [and] separating the data units corresponding to at least one of the plurality of audio signals based on the extracted indicating information and decoding the data units corresponding to at least one of the plurality of audio signals; and

a controller, coupled to the signal processor, to output the decoded data units corresponding to at least one of the plurality of audio signals in response to user selection, the controller controlling the signal processor to only reproduce the data units corresponding to the selected audio signal [compare presentation time information of the separated signal to a synchronizing signal generated from the

controller, and thereby to control presentation time of the separated signal,

wherein each sector corresponding to the plurality of audio signals are sequentially recorded on the medium between sectors of the video signal, and the controller controls the signal processor to reproduce the sector corresponding to the selected audio signal to output at least one of the plurality of audio signals in response to a user selection].

25. (Amended) A device as claimed in claim 24, wherein the first type audio signal corresponds to [stereo] accompaniment sound.

27. (Amended) A device as claimed in claim 23, wherein the plurality of audio signals are encoded by MPEG coding mode, wherein the signal processor further comprises:

an MPEG audio decoder for decoding at least one of said plurality of audio signals received[, and transmitting the data in the bit stream].

28. (Amended) A method for reproducing a digital signal recorded on a medium, said digital signal including a video signal, a plurality of audio signals encoded into audio channels wherein each audio signal is composed of at least [one sector] data units of audio information, and indicating information [located in front of the sector and] for identifying each audio signal, a block of the data units being sequentially interleaved between data units of video signal, each audio

signal being represented by one of the data units in the block [wherein each audio signal is interleaved within a predetermined unit], comprising the steps of:

demodulating the digital signal to restore an original signal;

receiving the video signal and the plurality of audio signals;

extracting the indicating information [from the received plurality of audio signals]; [and]

separating the data units corresponding to at least one of the plurality of audio signals based on the extracted indicating information;

decoding the data units corresponding to at least one of the plurality of audio signals; and

[comparing presenting time information of the separated signal to a synchronizing signal generated from a controller; and]

(controlling the extracting and decoding steps to only reproduce data units corresponding to one of the plurality of audio signals in response to user input [presentation time of said separated signal to output at least one of the plurality of audio signals according to said comparing step, in response to user selection, wherein each sector corresponding to audio signals are sequentially recorded on the medium between sectors of the video signal, and controlling to reproduce the sector corresponding to the selected audio signal].

30. (Amended) The method of claim 28, further including the step of synchronizing an [the] audio presentation time of the separated plurality of audio

signals using timing information in the received audio signals [the time information].

Please add the following new claims:

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31. A device for processing a digital signal, comprising:  
an audio signal processor receiving indicating information and first units of digital audio data interleaved at a predetermined interval with second units of digital video data, the digital audio data including more than one audio channel, and the indicating information indicating a presence of the audio channels in the digital audio data, the audio signal processor extracting the indicating information, and decoding and separating at least one of the audio channels using the indicating information; and

a control circuit outputting only the decoded at least one of the audio channels based on user input.

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32. The device of claim 31, wherein the digital audio data includes an audio channel of a first type and an audio channel of a second type, contents of the audio channel of the first type being different from contents of the audio channel of the second type.

33. The device of claim 32, wherein the audio channel of the first type includes accompaniment sound.

34. The device of claim 32, wherein the audio channel of the first type includes accompaniment sound and vocals, which are associated with the digital video data.

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35. The device of claim 31, further comprising:  
a timing signal generator generating a timing signal; and wherein  
the audio signal processor compares the timing signal to timing information in the digital audio data, and outputs the decoded at least one of the audio channels based the comparison.

36. The device of claim 31, wherein the audio signal processor MPEG decodes the at least one of the audio channels.

37. The device of claim 31, further comprising:  
a demodulator demodulating the digital audio data prior to receipt by the audio signal processor.

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38. A method for processing a digital signal, comprising:  
receiving indicating information and first units of digital audio data interleaved at a predetermined interval with second units of digital video data, the digital audio data including more than one audio channel, and the indicating

information indicating a presence of the audio channels in the digital audio data;  
extracting the indicating information;  
decoding and separating at least one of the audio channels using the  
indicating information; and  
outputting only the decoded at least one of the audio channels based on  
user input.

39. The method of claim 38, wherein the digital audio data includes an  
audio channel of a first type and an audio channel of a second type, contents of  
the audio channel of the first type being different from contents of the audio  
channel of the second type.

40. The method of claim 39, wherein the audio channel of the first type  
includes accompaniment sound.

41. The method of claim 39, wherein the audio channel of the first type  
includes accompaniment sound and vocals, which are associated with the digital  
video data.

42. The method of claim 38, further comprising:

generating a timing signal;

comparing the timing signal to timing information in the digital audio data;